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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,885	11/06/2001	Kenneth Molee	53394.000521	4548

7590 09/03/2003
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EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

ASTD

Office Action Summary

Application No.

09/985,885

Applicant(s)

MOLEE ET AL.

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) 18-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 5, 7-9, and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over E.P. 372,120 in view of U.K. 2,118,021 and either one of E.P. 380,781 or Japanese Patent 61-152801.

E.P. '120 suggested that one skilled in the art at the time the invention was made would have applied adhesive upon elastic treads with a dispensing comb wherein the elastics were fed through the grooves or slots of the comb and coated with an adhesive material of the hot melt type. Subsequent to the coating, the coated strands or threads were brought into contact between two webs and the adhesive was used to join the two webs together with the elastics there between. The reference suggested that one skilled in the art would have applied adhesive onto the strands with an applicator which included a comb structure through which the strands were fed. The reference also suggested that one skilled in the art would have applied the glue intermittently upon the elastics. The reference failed to specify the amount of glue applied and that there was expressly no contact in the coating operation with the two substrate webs which were used to sandwich the elastics therein.

U.K. '021 taught a process for coating elastic strands in the manufacture of a disposable diaper wherein the elastic strands were fed through a comb structure where the strands were coated with an adhesive material at the comb. The reference suggested that the temperature of the coating was controlled and that the amount of material applied to the elastic strands was controlled. Additionally, the elastic strands were tensioned in application and secured onto a

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topsheet and a backsheet material with the adhesive and thus the reference suggested that the elastics were fed through the comb at a predetermined speed. The reference more specifically suggested that one skilled in the art at the time the invention was made would have utilized a coating device 42 which included a plurality of slits 60, 61, and 62 which were aligned in the nozzle coating device 42. the elastic strands were fed through the slits of the applicator 42 in order to coat the individual elastic strands 15A. the reference additionally taught that subsequent to the coating operation the elastic strands 15A were joined to the topsheet 11 and backsheet 12 in the joining operation. The reference additionally suggested that the elastics would have been tensioned to between 250-300% stretch in the process (and thus the speed with which the elastic strands were fed was regulated in the operation). The reference additionally suggested that one skilled in the art would have controlled the amount of adhesive applied to the elastic strand (see page 5, lines 43-57. clearly, the reference suggested the use of an applicator comb for application of adhesive to elastic strands in a process of joining the strands to two substrates when making a disposable diaper. The applicant is additionally advised that the reference to U.K. '021 clearly did not envision contacting the webs with the coating material until after the elastics were coated with the adhesive. Additionally, the reference specified for an elastic string having a cross sectional area of 0.185 mm^2 one skilled in the art would have applied between .1 and .2 g/m of the adhesive, see page 5, lines 44-52. the reference appears to suggest that the determination of the suitable amount of adhesive was a function of the cross sectional area of the elastic strands applied (and that for a lower cross sectional area one skilled in the art would have been led to employ a lesser amount of adhesive). Additionally, the reference to U.K. '021 suggested that those skilled in the art would have been led to utilize rubber strands which were of a cross

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sectional area of between 0.03-0.45 mm². The applicant is therefore advised that when one practiced the operation with strands of a cross sectional area of say 0.08 mm² one would have understood that a lesser amount of adhesive would have been useful and such would have been determined experimentally. The use of 0.0444 or less g/m of adhesive to length of elastic would have been within the purview of the ordinary artisan. The applicant is additionally advised that the coating device in U.K. '021 did not contact the substrate with adhesive during application of adhesive upon the strands.

To further evidence that those skilled in the art would have understood that the device of E.P. '120 was not a contact coating device (wherein the applicator applied the adhesive upon the strands only when applying the adhesive to the elastic strands and not on the substrate) the references to E.P. '781 or Japanese Patent '801 are cited. Both E.P. '781 and Japanese Patent '801 suggested that those skilled in the art would have incorporated non-contact coating techniques for the coating of the elastics (where the applicators did not apply adhesive directly upon the substrates but rather applied the adhesive only upon the elastics as the adhesive was dispensed from the comb applicators. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the adhesive applicator of U.K. '021 in the operation of E.P. '120 to provide application of adhesive only upon the elastics during application of the adhesive to the same prior to sandwiching the elastics between two webs of material wherein one skilled in the art would have readily appreciated that the application of the adhesive with the comb of E.P. '120 would have taken place without the introduction of adhesive upon the first or second webs which sandwich the elastics as suggested by either one of E.P. '781 or Japanese Patent '801.

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3. Claims 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with the state of the prior art as exemplified by the admitted prior art for the same reasons as expressed in paper no. 6, paragraph 12.

Regarding the application of the elastics in the waist and tummy section of the undergarment, such was known per se in the manufacture of disposable diapers as suggested by the admitted prior art. Additionally, in the manufacture of a leg cuff, as expressed in paper no. 6, one skilled in the art would have readily appreciated that the sheet material would have been folded over to form the cuff construction and such is taken as conventional in the art.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with any one of Buell, Brody, or E.P. 626,161 for the same reasons as expressed paragraph 14 of paper no. 6.

5. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with any one of Faulks et al, Laux et al, or St. Louis et al for the same reasons as presented in paper no. 6, paragraph 16.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 3-9, 11-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant has amended claim 1 to recite that the amount of adhesive applied is about 0.0444 grams per meter of elastic or less (i.e. a miniscule amount of adhesive to 0.0444 grams of adhesive per meter of elastic), however there is no support in the original disclosure for the specified range (greater than 0.0 to about 0.0444 grams per meter of elastic). The applicant is advised that one skilled in the art would not have understood that the applicant had the same in his possession at the time the application was filed. While the example as described in Table 2 on page 29 suggested that some adhesive between 0.0357-0.0444 grams per meter of elastic was present, there is no support for the lower portion of the range of greater than 0.0 to 0.0357. thus applicant does not have support to define the specified range and did not have the same in his possession at the time the application was filed.

Election/Restrictions

8. Applicant's election of Group I in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

9. Claims 18-26 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 9.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3-9, 11-17 have been considered but are moot in view of the new ground(s) of rejection.

The applicant argues that no reference suggested the specified amount of adhesive applied to the elastic strands per meter of elastic strand as now defined in the claims. The applicant however is advised as noted above that such language as presented is deemed to be new matter in that applicant did not have in his possession the specified range for the amount of adhesive applied per meter of elastic. Namely, the applicant lacks support for the lower end of the specified range and was not in possession of greater than zero to about 0.03 grams per meter of elastic as addressed above. Applicant also noted that the reference to U.K. '021 did not teach the specified amount of adhesive because it required 0.1 gram per meter of the elastic. The applicant is advised, however that the portion of the reference referred to appears to suggest that the amount of adhesive applied to the rubber strands in U.K. '021 was a function of the cross sectional area of the strands themselves and that in the example the cross section area of each strand was 0.185 mm^2 . Clearly, for a strand having a smaller cross sectional area one would have expected that less adhesive would have been necessary to achieve an adequate bond for the elastic strands. The reference to U.K. '021 suggested that the cross sectional area of the strands lied in the range of $0.03\text{-}0.45 \text{ mm}^2$. Thus, one skilled in the art would have recognized and determined through routine experimentation that the amount of adhesive necessary for an elastic strand of a cross sectional area of 0.03 mm^2 would have been less than 0.0444 g per meter of elastic as the cross sectional area of 0.03 is orders of magnitude less than 0.185 where 0.1 grams per meter of elastic was utilized.

The applicant argues that U.K. '021 required the application of different adhesive to secure the plies 11 and 12 together. It should be noted that the reference to U.K. '021 did in fact secure the elastics to the webs 11, 12 only with the adhesive supplied with the adhesive

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dispensing comb. The additional adhesive referred to by applicant appears to be for securement of the absorbent pads between the webs 11, 12. In any event, the reference to E.P. '120 clearly suggested that those skilled in the art would have understood that the elastics would have been secured to the webs only by virtue of the adhesive dispensed from the comb applicator.

Additionally, the applicant is advised regarding the reference to E.P. '120 that the reference while appearing to coat the substrate at the same time the elastics are coated was clearly not so limited in processing as E.P. '781 employed an identical form of comb applicator which only coated the elastics with adhesive and not the substrate simultaneously. Likewise, the references to U.K. '021 and Japanese Patent '801 suggested that those skilled in the art at the time the invention was made would have readily appreciated that the comb coating device would have been utilized only to coat the elastics where the same was spaced from the webs and then the elastics with the adhesive thereon would have been brought into contact with the substrates for joining of the substrates together.

The applicant argues each of the references in a vacuum of the others, while the proper criteria for obviousness is what the prior art when taken as a whole would have suggested to the ordinary artisan and one cannot show nonobviousness by attacking references individually where combinations have been made. Applicant is advised that while the reference to E.P. '120 might contact the first or second sheet during the coating operation, one skilled in the art as evidenced by any and all of U.K. '021, E.P. 781 or Japanese Patent '801 would have readily appreciated that the adhesive need not contact the substrates during the coating of the elastic strands in the manufacture of the disposable absorbent article. Whether one contacted the substrate with the adhesive during the coating operation or not would have been recognized as alternative

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processing wherein one skilled in the art would have selected either coating the substrates simultaneously or only coating the strands for none but the expected advantages and disadvantages known for such processing. Applicant is advised additionally that one skilled in the art would have readily appreciated that not contacting the substrates with the adhesive during the dispensing of adhesive on the elastics would have resulted in the use of less adhesive (which in the art of making a disposable diaper would have been a desirable result) while still attaining an adequate bond of the elastics to the substrate.

The applicant did not address the state of the prior art as exemplified by the admitted prior art and therefore it is believed that applicant agrees with the Office interpretation of the same that: (1) application of elastics for tummy and waist portions of disposable absorbents were well known, and; (2) application of elastics for cuffs was well known in the art wherein one would have understood that the sheet material would have been folded over the elastics. Because the applicant did not address the state of the prior art as exemplified by the admitted prior art it is believed that applicant acquiesced to the statements previously made.

Regarding the references to any one of Buell, Brody, or E.P. 626,161 and any one of Faulks et al, Laux et al, or St. Louis et al, the applicant argues that these references taught that one skilled in the art would not have just used the adhesive of the dispenser to join the sheets together, that they taught different kinds of applicators for the adhesive (St. Louis) and that they did not teach the adhesion only with the adhesive of the dispenser without application of adhesive on the substrates during application. The applicant is advised that these references were not cited for these concerns as the combination of references set forth above in paragraph 2 established that one skilled in the art would have practiced the claimed invention of claim 1.

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instead these references were cited to show specific constructions employed in diaper manufacture as well as the snap back of elastics severed in the unbonded condition (which would have been performed in the operation of claim 1). The applicant is advised that as such applicant is merely stating that these references do not cure the deficiencies of the rejection of the independent claim and not addressing the specific teachings of the references for which they were applied. The applicant is advised that because there is no deficiency in the rejection of the independent claims that these rejections with the additional teachings of these references is deemed sustainable.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Merkatoris et al and Cucuzza suggested the folding over a single web in the manufacture of a leg cuff where elastics were secured to the folded web.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

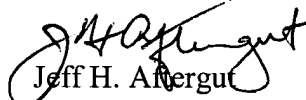
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
August 28, 2003